

STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

Central Illinois Light Company	)	
	)	Docket No. 00-0579
Proposal to Eliminate its Electric Fuel	)	
Adjustment Clause and Include Fuel and	)	
Power Supply Charges in Base Rates.	)	
(Tariff pages filed July 31, 2000)	)	

DIRECT TESTIMONY OF

GEORGE STERZINGER

ON BEHALF OF THE

CITIZENS UTILITY BOARD

DATED NOVEMBER 13, 2000.

*Revised* CUB Exhibit 1.0 *PR*

\*\*\* PUBLIC VERSION \*\*\*

ORIGINAL FILE

00-0579

CUB 1.0 R

12-19-00

CB

1 Q. WOULD YOU STATE YOUR NAME AND ADDRESS AND PROVIDE YOUR  
2 PROFESSIONAL QUALIFICATIONS?

3 A. My name is George J. Sterzinger. My address is EER Consulting, 1400 16<sup>th</sup>. St., NW  
4 Suite 715, Washington D.C. My professional experience is described in Attachment A.  
5

6 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

7 A. My testimony reviews the CILCO request to end the use of a Fuel Adjustment Clause  
8 (FAC) and to place "reasonable, prudent and necessary jurisdictional power supply costs"  
9 in base rates.  
10

11 Q. WOULD YOU SUMMARIZE THE CILCO REQUEST?

12 A. CILCO proposes to use a projected test year to determine "reasonable, prudent and  
13 necessary jurisdictional power supply costs." It uses a future period from September  
14 2000 to August 2001. Based on those projected power costs, CILCO proposes to convert  
15 the FAC to a cost of \$.01225 per kWh and add that charge across all tariffs on a uniform  
16 per kWh charge.  
17

18 Q. WOULD YOU SUMMARIZE YOUR UNDERSTANDING OF THE CILCO  
19 PROPOSAL AND YOUR RECOMMENDATIONS WITH RESPECT TO CILCO'S  
20 REQUEST?

21 A. CILCO's proposal affects three areas that need to be reviewed. First, CILCO calculates  
22 projected power costs and then rolls these costs from a Fuel Adjustment Clause (FAC)  
23 into base rates. Second, CILCO sets power costs for the FAC or tariffed sales after

1 allocating generation resources and costs between tariffed and non-tariffed sales. Third,  
2 CILCO implicitly makes a rate design recommendation by virtue of its proposal to pass  
3 the FAC costs into base rates on a flat per kWh basis.

4  
5 Q. WHAT FAC COST DO YOU RECOMMEND BE ROLLED INTO BASE RATES?

6 A. I calculate a power cost estimate that would produce an FAC of \$.<sup>00810</sup>~~00585~~ per kWh. That  
7 calculation reflects all the changes to power cost estimation and generation allocation  
8 discussed below.

9  
10 Q. WHAT ARE YOUR CONCERNS AND RECOMMENDATIONS WITH RESPECT TO  
11 THE COST OF POWER?

12 A. The projected power cost estimates made by CILCO are not "reasonable, prudent and  
13 necessary" and should be rejected for the following reasons. The cost estimates for the

14 \*\*\*

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15 \*\*\*

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17 \*\*\*

18 \*\*\* at the price of Cinergy futures without having made any determination  
19 that this resource is the lowest cost or that it represents the actual costs that will be  
20 incurred by CILCO for the 15-month period.

21 Under the assumption that both tariffed and non-tariffed sales should have access  
22 to an average cost of generation to meet load, I have recalculated the FAC based on  
23 changes reflecting the first two of the three areas of concern. The calculated FAC

1 reflecting only two of the three changes is shown in CUB Ex. 1.4a. As shown in CUB  
2 Ex. 1.5, which presents CILCO responses to CUB Data Requests 1-9 and 1-10, CILCO  
3 has made no attempt to demonstrate that the Cinergy prices are the lowest cost available.  
4 CILCO has not entered into contracts to purchase power at the stated rates. These power  
5 costs are unknown and immeasurable and therefore should not be included in base rates.  
6 My recommendation is that the Commission deny the request to set base rates until  
7 CILCO demonstrates that the power costs are known, measurable and reasonable, i.e.  
8 least cost. In the alternative, the Commission should find that competitive power  
9 procurements, which are not necessary to serve tariffed load, should be allocated to the  
10 non-tariff, competitive sales. The FAC calculated under that assumption, is provided in  
11 CUB Ex. 1.4b.

12  
13 Q. WHAT ARE YOUR RECOMMENDATIONS WITH RESPECT TO THE  
14 ALLOCATION OF GENERATION RESOURCES IN THE CILCO PROPOSAL?

15 A. Although it is not discussed in any of CILCO's pre-filed testimony in this proceeding, it  
16 is clear from CILCO's data that the company proposes to lock into base rate procedures  
17 for allocating and assigning the costs related to providing electricity under two very  
18 different costing procedures. The result of those allocations is to: a.) unfairly increase the  
19 cost of power for tariffed customers; b.) to provide below market price power to CILCO  
20 for use in jurisdictional and non-jurisdictional competitive sales; and c.) to block  
21 effective competition from developing in the CILCO service territory.

22 CILCO makes substantial sales to "Sales not Subject to FAC", i.e. Special  
23 Contract sales. In response to CUB Data Request 2.3 CILCO defines these sales as

1 jurisdictional and non-jurisdictional, not subject to regulation, and competitive. CILCO  
2 allocates generation costs to provide these sales with the lowest cost generation sources.  
3 As a result, tariffed sales covered by the FAC and base rates are allocated the remaining  
4 generation and other resources including purchased power, which under the CILCO  
5 assumptions is very expensive. "Sales not Subject to FAC" are made at a loss if  
6 reasonable generation cost allocation methods are used to assign generation costs to  
7 them. Under the methodology proposed by CILCO, these losses are passed on to the  
8 FAC covered sales and become a part of base rates.

9  
10 Q. WHAT ARE YOUR RECOMMENDATIONS WITH RESPECT TO RATE DESIGN?

11 A. If the CILCO power cost estimates are used, my recommendation is that the base rates be  
12 adjusted to reflect the seasonal variation in costs. CILCO proposes to pass the calculated  
13 cost of power into base rates on a flat per kWh charge. This recommendation does not  
14 track the CILCO cost of power which CILCO shows to be extremely sensitive to peak  
15 and seasonal usage. Rates should be designed to reflect costs to the extent possible.  
16 CILCO's proposal to adjust base rates on a flat per kWh basis does not meet this test. I  
17 recommend that the base rates be adjusted on a seasonal basis as a step towards sending  
18 the proper price signal to consumers. A summer seasonal period from June through  
19 August with the winter period defined as the remaining months would improve the price  
20 signal in base rates.

21  
22 Q. TURNING TO THE FIRST AREA OF CONCERN, THE PROJECTED POWER  
23 COSTS DEVELOPED BY CILCO, WOULD YOU EXPLAIN WHY YOU DO NOT

1 FIND THE PROJECTIONS "REASONABLE, PRUDENT AND NECESSARY  
2 JURISDICTIONAL POWER SUPPLY COSTS"?

3 A. In order to explain my reservations, it would be useful first to outline in broad terms the  
4 situation CILCO faces obtaining generation resources to meet the load it serves. CILCO  
5 has three primary sources of generation: a.) company-owned generation, b.) Central  
6 Illinois Public Service (CIPS) purchased power, c.) and "Other," available to it which I  
7 will discuss in ascending order of cost. CILCO owns several generation resources.  
8 CILCO-owned generation is labeled by CILCO as \*\*\* \*\*\*

9 \*\*\*

10 .\*\*\* Next, is the firm purchased power contract CILCO has with CIPS.  
11 This contract runs for three years of the five-year period CILCO considers in this case.  
12 CILCO proposes to \*\*\* \*\*\*

13 Finally, CILCO calculates on a \*\*\*

14 \*\*\* CILCO then assumes that the  
15 load will be met with power purchased at a price determined from a forward price curve  
16 for the CINERGY Electricity Exchange. This third source of generation is labeled by  
17 CILCO as "Other." The CINERGY exchange is offered on the New York Mercantile  
18 Exchange. CUB Ex. 1.1 shows the generation sources as percent of Available Generation  
19 and average cost per kWh for the 15-Month Projected period.

20 CILCO in turn serves three distinctly different types of load (ignoring Company  
21 Use). First, it serves the tariffed sales subject to the FAC. Second, it serves "Sales Not  
22 Subject to FAC." Third, it serves "Sales for Resale." In calculating the cost of projected  
23 power costs, it is important to examine: the reasonableness of the assumptions used to

1 determine the cost of the various resources available to CILCO, the size of the load  
2 served, and the use of generation resources to meet each of the three load types discussed  
3 above.

4  
5 Q. HOW HAS CILCO PROPOSED TO ESTIMATE POWER COSTS FOR THE  
6 PROJECTED PERIODS?

7 A. \*\*\*

8 \*\*\* At this time I have not formed an  
9 opinion as to the reasonableness of these estimates. For the CIPS generation contract,

10 \*\*\*

\*\*\*

11 Finally, for all residual generation requirements, \*\*\*

12 \*\*\*

13  
14 Q. IN YOUR OPINION IS THE ADJUSTMENT PROPOSED TO THE CIPS  
15 PURCHASED POWER CONTRACT REASONABLE?

16 A. The adjustment proposed is not reasonable for two basic reasons. First, \*\*\*

17  
18 \*\*\*Second, CILCO

19 \*\*\*

\*\*\*that replaces the CILCO purchase

20 without showing that it the most reasonable, lowest cost source of power.

21  
22 Q. WHY IS IT UNREASONABLE TO ADJUST THE CIPS CONTRACT TO REFLECT  
23 THE FACT THAT IT ENDS IN THREE YEARS?

1 A. The Illinois Public Utilities Act Section 9-220 (d) states: "The Commission's order shall  
2 approve rates and charges that the Commission, based on information in the public  
3 utility's filing or on the record if a hearing is held by the Commission, finds will recover  
4 the reasonable, prudent and necessary jurisdictional power supply costs or gas supply  
5 costs incurred or to be incurred by the public utility during a 12-month period found by  
6 the Commission to be appropriate for these purposes, provided, that such period shall be  
7 either (i) a 12 month historical period occurring during the 15 months ending on the date  
8 of the public utility's filing, or (ii) a 12 month future period ending no later than 15  
9 months following the date of the public utility's filing." (Emphasis Added). For the  
10 period allowed in the statute, the CIPS contract will be in effect and the cost of purchased  
11 power should be based on the actual cost of CIPS power. Even putting aside the statute,  
12 the method CILCO uses to adjust the CIPS contract price is unfair and inefficient.  
13 CILCO proposes to collect a dollar now for anticipated costs it faces four or five years  
14 from now. This ignores the time value of money. The present value of the funds CILCO  
15 collects will exceed the actual costs of replacement power even assuming that the power  
16 cost estimates CILCO uses as the replacement for the CIPS contract are reasonable.

17  
18 Q. ARE THE REPLACEMENT COSTS CILCO USES FOR THIS PURPOSE  
19 REASONABLE?

20 A. They are not. CILCO uses a \*\*\*

21 \*\*\*on the CENERGY

22 Futures Market that is run by the New York Mercantile Exchange. There are several  
23 problems with this estimate. CILCO makes no showing that the estimate is the lowest



1 cost source of replacement power. The cost estimate CILCO uses \*\*\*

2 \*\*\* It is reasonable to expect  
3 that the futures prices on this day may have reflected the shortage in the markets. CILCO  
4 should provide estimates for the future prices taken from a large number of days over a  
5 number of months. Finally, at the time of preparing this testimony the New York  
6 Mercantile Exchange reported very little open interest in the CINERGY Futures Market  
7 calling further into question the usefulness of price estimates taken from it for any  
8 purposes.

9  
10 Q. TURNING TO THE ALLOCATION OF GENERATION RESOURCES, WOULD YOU  
11 EXPLAIN HOW CILCO ALLOCATES COSTS IN ITS PROPOSAL?

12 A. These calculations are shown in CUB Ex. 1.3. \*\*\*

13  
14  
15  
16  
17 \*\*\* CILCO then calculates the  
18 \*\*\*

19  
20  
21 \*\*\* In setting the power cost for \*\*\*

22  
23 \*\*\* \*\*

\*\*\*

Q. IS THIS ALLOCATION REASONABLE, PRUDENT AND NECESSARY?

A. It is not. There is no economic justification for assigning the lowest cost generation resources to one type of sales--sales not subject to normal regulatory oversight. These are competitive, non-regulated sales. My recommendation is that the Commission should assign none of the low cost company generation to these sales unless it is clear that the resources are not necessary for serving tariffed load. Alternatively, the Commission should allocate an average cost of generation for tariffed and competitive sales. However, this cost should include only a reasonable and known and measurable estimate of the "Other" resources CILCO includes in total generation costs.

Q. COULD YOU EXPLAIN YOUR EARLIER STATEMENT THAT THESE SALES COULD STOP THE DEVELOPMENT OF COMPETITION IN THE CILCO TERRITORY?

A. The CILCO proposal is to allocate generation to serve the Non-FAC Sales at below market prices. CILCO can then make a profit at any negotiated, unregulated price that is above the below-market price of generation and equal to or less than the market price for generation. CILCO can profit at negotiated rates that no competitor can match. No customer will leave the CILCO contract to take service from alternative providers. The situation is further complicated by CILCO recovery of the losses on the \*\*\*

\*\*\* CUB Ex. 1.3 calculates these losses in two ways. If it

1 is assumed that the Non-FAC Sales are incremental, competitive sales that should pay a  
2 market rate for power, and if you further assume that the CINERGY estimate used by  
3 CILCO is a reasonable market price, then CILCO loses \*\*\* on the  
4 projected Non-FAC Sales over the 15-month projected period. If one assumes that the  
5 Non-FAC Sales should pay the average of all power costs, then the losses are

6 \*\*\* In either case, the losses are not a risk to CILCO since they are collected  
7 from the FAC Base rate adjustment. This is a cross-subsidization that harms tariffed  
8 customers and blocks the development of competition.

9  
10 Q. HAVE YOU RECALCULATED THE APPROPRIATE POWER COST REFLECTING  
11 THE ADJUSTMENTS TO THE CIPS POWER COSTS AND THE ALLOCATION OF  
12 GENERATION RESOURCES?

13 A. I have recalculated FAC in two ways: one assigning an average cost of generation to all  
14 sales, tariffed and non-tariffed. This calculation is shown in CUB Ex. 1.4a. Because  
15 CILCO has failed to provide evidence that the non-CIPS purchase power is the least cost  
16 power, this calculation is incomplete. CUB Ex. 1.4a sets the cost of CIPS on-peak power  
17 purchases at the current price of \$24 per MWH. In addition, CUB Ex. 1.4a allocates to  
18 the Non-FAC Sales generation resources priced at the average cost for all generation  
19 purchases. CUB Ex. 1.4a does not show a recalculated cost for the Non-CIPS purchased  
20 power which is priced at the Cinergy Forward price. I do not recommend that the FAC  
21 presently calculated in CUB Ex. 1.4a be rolled into base rates at this time.

1 Q. WHY DO YOU RECOMMEND THAT THE FAC YOU CALCULATE IN CUB EX.  
2 1.4A NOT BE ROLLED INTO BASE RATES AT THIS TIME?

3 A. CUB Ex. 1.4a currently includes a category of purchase power, labeled "Other" by  
4 CILCO, that represents \*\*\*

5  
6 \*\*\* To be included as part of base rates, CILCO  
7 should demonstrate to the Commission that these costs are known and measurable, i.e.  
8 the product of a contract or well documented spot market purchase, and reasonable, i.e.  
9 least cost. CILCO was asked in discovery to provide all support that the Cinergy forward  
10 prices used are known, measurable and, most importantly, the least cost resources  
11 available to CILCO for the period in question. CUB Ex. 1.5 presents the CILCO answers  
12 to those requests. Based on those replies, it remains unclear whether the Cinergy prices  
13 represent reasonable least cost estimates. The Commission should either disallow these  
14 costs into base rates until CILCO demonstrates that these resources are likely to be the  
15 least cost resources or the Commission should separate the "Other" purchases from those  
16 used to serve tariffed load. If this latter recommendation is adopted, the "Other"  
17 resources would serve the Non-FAC Sales. The FAC under this allocation is shown in  
18 CUB Ex. 1.4b.

19  
20 Q. PLEASE EXPLAIN CUB EX. 1.4b.

21 A. In CUB Ex. 1.4b I have calculated the FAC assuming that the purchased power  
22 generation is first assigned to the non-tariffed sales. To the extent these sales require  
23 additional generation resources this calculation assigns them at CILCO cost. CUB Ex.

1 1.4b is based upon an electronic worksheet provided and used by CILCO to calculate the  
2 FAC which did not take into account peak load or monthly demand requirements and  
3 may need to be refined to reflect those considerations. However, it does show what the  
4 \*\*\*

5 \*\*\* This proposed allocation of generation resources does not prevent  
6 CILCO from obtaining generation resources on the competitive market and negotiating  
7 contracts with customers that are to CILCO's economic advantage. It does, however,  
8 prevent the cross-subsidization of CILCO's non-regulated business with low cost  
9 regulated assets.

10  
11 Q. TURNING TO YOUR RATE DESIGN RECOMMENDATION, WOULD YOU  
12 EXPLAIN WHY YOU RECOMMEND A SEASONAL ADJUSTMENT TO BASE  
13 RATES?

14 A. Accepting for the moment the present CILCO cost data, CILCO \*\*\*

15  
16 \*\*\* If the base rates are adjusted on a  
17 flat per kWh basis this will mean that the summer peak use will be subsidized by  
18 consumption in non-summer months. This will be unfair to users who at present have  
19 less of their overall use in the summer period. Most seriously, the summer subsidy will  
20 tend to encourage use in the summer that will drive up costs in the future. I recommend  
21 that the Commission adjust base rates on a seasonally differentiated basis. The summer  
22 period I suggest for consideration is the period from June through <sup>August</sup> ~~September~~. The winter  
23 period would be all other months.

1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

2 A. Yes, it does pending the receipt of the remaining unanswered data request.

## CENTRAL ILLINOIS LIGHT COMPANY

ICC DOCKET NO. 00-0579

## Response to CUB Data Request 1.1 through 1.22

1.9 Mr. Livingstone states that: "The ENPRO model is used to determine unit loading based on forecasted load coupled with an economic dispatch of the CILCO units. The five-year outage rate is used to determine forecasted availability of the units. The model uses inputs on heat rate and fuel costs to calculate the economic values of the units. The model provides generation numbers by unit and purchase power requirements for the system on an hourly basis." (Livingstone Direct pg.4, lines 67-72).

- C. Are firm purchased power contracts inputs to the model?
- D. Please provide all work papers used to determine the amount of purchased power that would be priced at the Cinergy forward curve based on the ENPRO model.

Response:

- A Yes.
- B The CIPS contract was an input to the model. Anytime that more energy was needed than the CIPS contract provides or the CIPS contract was not available, the energy was priced at the Cinergy forward curve. No specific contracts are currently in place to cover this energy. The amounts on a monthly basis are listed in attachment #2B.

Provided by: Bill Livingstone